

Claims

1. A method of ensuring service grade agreement in multitask multiuser service platform, comprising steps of:

(A) setting user's message queues in different priorities, kernel processing queue and strategy deciding module in the service platform;

(B) processing new initial message of user's service from service layer or network layer in the strategy deciding module for accepting or not;

(C) classifying treatment of the user's service message in the strategy deciding module based on the message priority level and the user's priority;

(D) inputting the user's service message to corresponding user's message queue in the strategy deciding module for the treatment in the kernel processing queue.

2. The method of ensuring service grade agreement according to claim 1, wherein, at step (A), the strategy deciding module classifies the user's service message based on the user's priority and the service priority and respectively puts the classified user's service message in user's message queues in different priorities; the kernel processing queue conducts a corresponding process to the message therein based on different priorities of the user's message queues, so as to manage the service grade agreement in multitask multiuser service platform and provide service of different qualities to users and/or services with different priorities.

3. The method of ensuring service grade agreement according to claim 1 or 2, wherein, at step (A), user's priorities are ranked from low to high into three grades of ordinary user, prior user and high-grade user, or ranked into a different number of grades.

4. The method of ensuring service grade agreement according to claim 2, wherein, at step (A), the service priority is distinguishable based on service type including delay, dither or bandwidth required by the service, and ranked from high to low into three grades of realtime multimedia grade, realtime voice grade and non-realtime message grade, or ranked into a different number of grades.

5. The method of ensuring service grade agreement according to claim 2, wherein, at step (B), the strategy deciding module further performs steps of:

(B1) the strategy deciding module interacts with a database used to store user information in service platform and acquires the user's priority; concurrently interacts with the service managing module in platform and acquires the priority of service to which the message pertains; and judges whether the message is an initial message initiated by user's service or not;

(B2) if the message is not an initial message initiated by user's service, proceed to step (C) for treatment;

(B3) if the message is an initial message initiated by user's service, whether to accept the application for the user's service is determined on condition of resources in current service platform thereby to initiate the service, wherein if acceptable, proceed to step (C) for treatment, and if not acceptable, directly turn back to a corresponding message of rejection.

6. The method of ensuring service grade agreement according to claim 2 or 5,

wherein, at step (C), the strategy deciding module performs steps of:

in consideration of priority of the user to which the message pertains and service priority acquired at step (B1), the priority of the message is determined, and to which queue the user message is inputted is determined based on the determination thus made and the condition of current user message queue of the same grade.

7. The method of ensuring service grade agreement according to claim 2, wherein, at step (D), the strategy deciding module performs steps of:

according to the decision at step (C), the user's message is inputted into a corresponding user's message queue in a different priority respectively for treatment of the kernel processing queue;

the kernel processing queue performs treatment for the message based on priority of the user's message queue.

8. The method of ensuring service grade agreement according to claim 7, wherein, the kernel processing queue concurrently reads out plural messages in a queue for each treatment in batches of user's messages in order to increase processing efficiency.

Abstract

The method of ensuring service grade agreement in multitask multiuser service platform includes the following steps: setting user's message queues in different priorities, kernel processing queue and strategy deciding module in the service platform; processing new initial message of user's service from service layer or network layer in the strategy deciding module for accepting or not; classifying treatment of the user's service message in the strategy deciding module based on the message priority level and the user's priority, inputting the user's service message to corresponding user's message queue in the strategy deciding module for the treatment in the kernel processing queue. So, service of different quality may be provided fairly according to the user's priority, service priority and service type.